

# Measuring method and circuitry for the determination of the trip current of residual current breakers

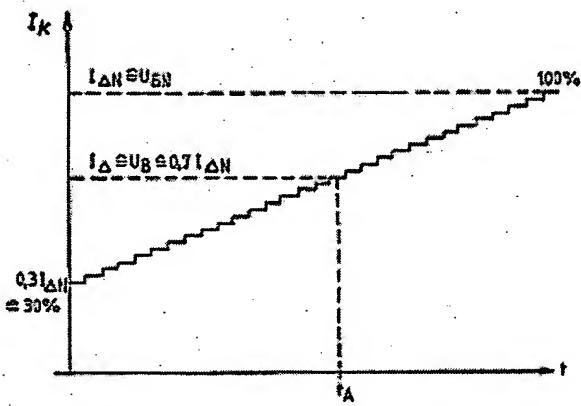
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DE3421829  
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## Abstract of EP0368030

The trip current ( $I_{\Delta\text{ELTA}}$ ) of a residual-current breaker is to be measured with the aid of a rising test current ( $I_K$ ). At the same time, the same two-terminal measuring device is to be used for measuring the contact voltage ( $U_B$ ) occurring at the tripping time ( $t_A$ ). Initially, the contact voltage ( $U_{BN}$ ) referred to the rated fault current ( $I_{\Delta\text{ELTA} N}$ ) is measured and then the test current ( $I_K$ ) is increased in predetermined steps. The steps are counted. The number of steps at the tripping time ( $t_A$ ) corresponds, referred to the total number of steps, both to the trip current ( $I_{\Delta\text{ELTA}}$ ) and to the associated contact voltage ( $U_B$ ). The measurement is applied in measuring and test instruments which are equipped with a computer.



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